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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,297	11/02/2001	Roland Boss	10011080-1	2488

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

GOFF II, JOHN L

ART UNIT PAPER NUMBER

1733

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,297

Applicant(s)

BOSS, ROLAND

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
  - 4a) Of the above claim(s) 5 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some \* c) ☐ None of:
    - 1. ☐ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/21/04 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-4, 6-13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Specification pages 1-3) in view of any one of Olson (U.S. Patent 3,664,912), Osogoshi et al. (JP 08052827 and see also the English abstract and machine translation), or Sendor et al. (GB 1289387).

The admitted prior art discloses conventional methods to bind sheets of media together. The admitted prior art teaches (sequentially) providing multiple sheets, applying an image (i.e. printing) to the sheets from an imaging device, coating each sheet with a protective polymer coating (e.g. acrylic or polymeric based film wherein the coating may be transparent), overlaying the sheets to form a sheet stack, and binding the sheets together in a binding region by for example stapling, stitching, gluing, etc. (Page 1, lines 9-15 and Page 2, lines 3-26 and Page 3,

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lines 1-3). The admitted prior art is silent as to binding the sheets together by fusing the sheets through the protective polymer coating in the binding regions. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to bind the multiple polymer coated sheets taught by the admitted prior art by fusing (e.g. through the application of heat and pressure) in the binding regions as it was a well known and conventional alternative in the art to fuse together multiple polymer (e.g. acrylic) coated sheets as opposed to binding by stapling, stitching, gluing, etc. as shown for example by any one of Olson, Osogoshi et al., or Sendor et al. for benefits such as a more durable bond, easier to recycle, cheaper material cost, etc.

Olson discloses a method of binding a plurality of sheets into a bound stack to form a book, magazine, pamphlet, brochure, etc. Olson teaches providing a plurality of sheets (e.g. paper sheets), applying a binding/protective polymer (e.g. acrylic) coating to at least a portion of each sheet, overlaying the plurality of sheets to form a stack, and applying binding energy (e.g. heat and pressure) to the stack in a binding region such that the binding/protective polymer coating of each sheet fuses to adjacent sheets in the stack to form a multiple paper form such as a book, magazine, pamphlet, brochure, etc. that can be printed on. Olson teaches binding by fusing the binding/protective polymer coating produces a superior, more durable bond than can be achieved by binding through stapling, sewing, adhesive binding, mechanical binding, etc. (Figures 1 and 2 and Column 1, lines 11-23 and 64-72 and Column 3, line 68 and Column 4, line 63 and Column 5, lines 10-15). Osogoshi et al. disclose a method of binding a plurality of sheets into a bound stack to form a book, calender, magazine, notebook, etc. Osogoshi et al. teach providing a plurality of sheets (e.g. paper sheets), applying a binding/protective polymer (e.g.

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acrylic) coating to at least a portion of each sheet, optionally printing the coated sheets, overlaying the plurality of sheets to form a stack, and applying binding energy (e.g. heat and pressure) to the stack in a binding region such that the binding/protective polymer coating of each sheet fuses to adjacent sheets in the stack to form a multiple paper form such as a book, calender, magazine, notebook, etc. that can be (optionally) further printed on. Osogoshi et al. teach binding by fusing the binding/protective polymer coating produces a bond that is easier to recycle and cheaper to produce than can be achieved by binding through stapling, mechanical binding, etc. (English abstract and paragraphs 4, 8, 10, 11, and 14 of the machine translation). Sendor et al. disclose a method of binding a plurality (e.g. more than three) of sheets into a bound stack to form a book, magazine, pamphlet, letter, etc. Sendor et al. teach providing a plurality of paper sheets, applying a binding/protective polymer (e.g. polyethylene) coating to at least a portion of each sheet, overlaying the plurality of sheets to form a stack, and applying binding energy (e.g. heat and pressure) to the stack in a binding region such that the binding/protective polymer coating of each sheet fuses to adjacent sheets in the stack to form a multiple paper form such as a book, magazine, pamphlet, letter, etc. Sendor et al. teach binding by fusing the binding/protective polymer coating produces a bond that requires less labor and cost than can be achieved by binding through stapling, sewing, adhesive binding, mechanical binding, etc. Sendor et al. further teach that choosing the particular binding regions as a function of the product produced is a conventional technique in the art (Page 1, lines 13-34, 48-52, and 69-72 and Page 3, lines 2-29 and 54-66).

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Regarding claims 6, 13, and 15, the admitted prior art teaches binding multiple media sheets together. It would have been obvious to one of ordinary skill in the art at the time the invention was made that "multiple" media sheets would have encompassed binding three sheets.

Regarding claims 7-9 and 12, the admitted prior art does not specifically teach all the various binding regions claimed. However, it is noted the admitted prior art teaches binding multiple media sheets together to form a bound stack. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the bound stack of multiple media sheets taught by the admitted prior art as modified by any one of Olson, Osogoshi et al., or Sendor et al. is used to form products such as books, magazines, pamphlets, brochures, etc. wherein it would have also been obvious to one of ordinary skill in the art to bond the multiple media sheets taught by the admitted prior art as modified by any one of Olson, Osogoshi et al., or Sendor et al. in the different claimed binding regions depending upon the particular above product made as this was conventional in the art, it being noted Sendor et al. is exemplary of this conventional technique.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-4, 6-13, 15, and 16 have been considered but are moot in view of the new ground(s) of rejection. Applicant has amended the claims to require a "transparent" coating. Applicant argues Olson and Osogoshi et al. teach coatings that contain pigment and applying the coating before printing on the paper as opposed to the admitted prior art which teaches a transparent coating and printing on the paper before applying the coating to the paper such that one would not look to modify the admitted prior art with Olson or

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Osogoshi et al. It is noted the admitted prior art teaches coating paper with a coating comprising for example acrylic or a polymer film that may be transparent or contain pigment. The admitted prior further teaches forming a bound stack from a plurality of the coated papers by stapling, stitching, gluing, etc. Olson, Osogoshi et al., and Sendor et al. teach coating paper with a coating comprising for example acrylic (See Olson and Osogoshi et al.) which is analogous to the acrylic coating taught by the admitted prior art or extruded polymer which is analogous to the polymer film coating of the admitted prior art (See Sendor et al.). Olson, Osogoshi et al., and Sendor et al. further teach forming a bound stack from a plurality of the coated papers by applying heat and pressure to a binding region to fuse the coating of adjacent papers. Each of Olson, Osogoshi et al., and Sendor et al. specifically teach the fusion technique is preferable to prior art bonding techniques such as stapling, sewing, adhesive binding, mechanical binding, etc. for reasons such as a more durable bond is formed between adjacent sheets, the bound stacks are easier to recycle, cheaper material cost, etc. Thus, modifying the admitted prior art to incorporate the fusion bonding taught by any one of Olson, Osogoshi et al., or Sendor et al. for the benefits given above would have been obvious particularly in view of the similar coating polymers of the admitted prior art and any one of Olson, Osogoshi et al., or Sendor et al.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



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